

REMARKS/ARGUMENTS

Claims

Claims 1-13 are pending in this application. Claims 12 and 13 have been amended. No new matter has been added.

Claim Rejections under 35 U.S.C. §102

Claims 12 and 13 have been rejected under 35 U.S.C. §102(e) as being anticipated by Yoshida et al., U.S. Patent Publication No. 2002/0174307. Applicants request reconsideration of the rejection for the following reasons.

The present invention, as set forth in claims 12 and 13 is directed to a management method for a storage system having a storage device, a switch and a computer, which are respectively connected by a network. A storage area of a storage device has an identifier (as a result of LUN masking) and the computer has a first address, such as an IP address (or domain name). A system administrator, for example, performs access control configuration to configure the LUN masking and also to enter a subnet address of a VLAN to which the computer and storage device belong. When the computer or storage device is connected to the network, the storage management device automatically configures the VLAN, thus overcoming the problem of configuration miss employing LUN masking and VLAN, which respectively designate a computer by using different IDs. In particular, the first address of the computer, which may be an IP address, is converted into a second address, such as a MAC address. Further, the second address of the computer is converted into an identifier of a port (Port ID) of the switch that is connected to the computer. The identifier of the port is then

added to the virtual LAN for the switch.

On the other hand, Yoshida discloses a VLAN-capable switch 110 which permits virtual LANs to be associated with specific physical network ports 115 (P1-P6, as shown in FIG. 1 of the patent). Network traffic in Yoshida that originates from a specific port 115 (specific client 105), can be identified via a VLAN identification label 120 which indicates which VLAN the client 105 belongs to. VLAN1, VLAN33, and VLAN217 are subnets. The switch 110 is connected to a network interface/controller 125, which controls data flow to and from a data storage device 140 having storage structures 135 (S1-S3). Network storage commands and data are passed to the clients 105 via the VLAN-capable switch 110 to the network interface/controller 125 which passes them onto the storage structures 135 of the data storage device 140.

The NAS device 100 of Yoshida has a port-to-VLAN table 145 for associating ports with VLAN's and an access control list 150, which communicates with the network interface/controller 125 and which associates storage structures 135 with particular VLAN identification labels 120. However, the arrangement of Yoshida does not suggest the method claimed by Applicants, which requires that the first address be converted into a second address and that the second address of the computer be converted into an identifier of a port of the switch to which the computer is connected. Then, the identifier of the port is added to the virtual LAN for the switch in the present invention, thereby making a VLAN table. Therefore, the rejection of claims 12 and 13 under 35 U.S.C. § 102(e) as being anticipated by Yoshida should be withdrawn.

Allowable Claims

Claims 1-11 have been allowed. Applicants thank the Examiner for the allowance of claims 1-11.

Priority Documents


Submitted herewith is a certified copy of the corresponding Japanese Patent Application JP2003-206165, filed in Japan on August 6, 2003. An indication that these documents have been safely received would be appreciated.

CONCLUSION

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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